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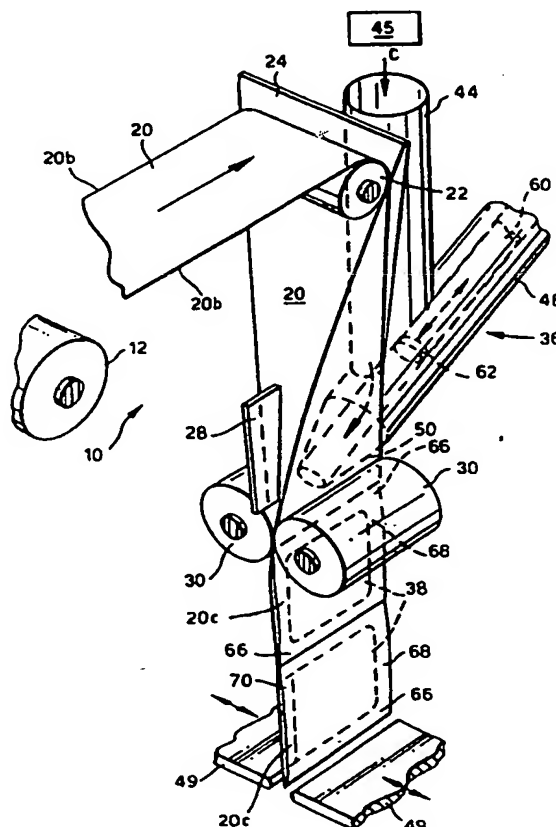
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(54) Title: METHOD AND APPARATUS FOR PACKAGING FLOWABLE MATERIAL USING MOVING WEB PACKAGING MATERIAL

(57) Abstract

Apparatus for manufacturing a DOY bag includes flow formers (24, 28) for causing a moving web (20) to have a transverse cross section which comprises two arms (20a) each having a free end coinciding with a respective lengthwise extending edge (20b) of the web and a portion interconnecting the arms which extends inwardly into the space between the arms. Heated sealing rollers (30) disposed downstream of the flow formers seal the web to form successive closed compartments (38). A device (36) feeds a flowable material into the space between the arms (20a) at a position upstream of the sealing rollers (30) such that each compartment (38) contains a predetermined amount of the flowable material. The apparatus preferably operates continuously producing between 300 and 1000 bags per minute.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 99/00761

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 B65B29/02 B65B51/28 B65B9/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 11 38 678 B (HESSER) 25 October 1962 see the whole document ---	1-3, 5-12, 15, 16, 18-21, 23-29, 31-35
Y	DE 10 24 868 B (KLAR) 20 February 1958 see the whole document ---	1-3, 5-12, 15, 16, 18-21, 23-29, 31-35
Y	FR 944 987 A (SALFISBERG) 21 April 1949 see page 2, line 75 - line 96; figure 1 -----	6, 26

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

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- *E* earlier document but published on or after the international filing date
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- *P* document published prior to the international filing date but later than the priority date claimed

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

17 June 1999

Date of mailing of the international search report

6.10.99

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Authorized officer

CLAEYS, H

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB 99/ 00761

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. Claims 1-35, 51,52 Method and apparatus for packaging flowable material
2. Claims 36-50 Device for dosing flowable material

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-35, 51, 52

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 99/00761

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 1138678	B	NONE	
DE 1024868	B	NONE	
FR 944987	A	06-05-1949	NONE

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